



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,998	10/27/2005	David Frank Burggraaf	P70407USD	2841
136 7590 06/18/2009 JACOBSON HOLMAN PLLC 400 SEVENTH STREET N.W. SUITE 600 WASHINGTON, DC 20004				
EXAMINER				
C'ARDENAS-GARCIA, JAIME F				
ART UNIT		PAPER NUMBER		
3634				
MAIL DATE		DELIVERY MODE		
06/18/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/523,998

Applicant(s)

BURGGRAAF ET AL.

Examiner

JAIME F. CARDENAS-GARCIA

Art Unit

3634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-64 is/are pending in the application.
- 4a) Of the above claim(s) 23-26,28,37,42 and 45-56 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22,27, 29-36, 38-41,43,44 and 57-64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 March 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-849)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 2, 7, 8, 17, 21, 22, 27 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferris United States Patent number 1 288 861 in view of Houk et al. United States Patent number 3 207 208.

Re Claim 1: Ferris teaches a closure assembly of an opening of or in a building, said closure assembly comprising

at least two mutually pivoted panels (7, 9) mounted with a mutual pivot axis (at hinge mounted at 8) at least substantially vertical and so as to be movable between:

(i) a closed condition whereby said at least two panels (7, 9), at least substantially in mutual alignment, provide at least a partial closure of said opening in or substantially parallel to a plane of said opening, and

(ii) an opened condition whereby said at least two panels (7, 9), mutually disaligned by having pivoted mutually towards each other, are substantially clear of said plane of said opening and where one of each, or all of said at least two panels, lie at an acute angle or parallel with respect to said plane of said opening,

one of said panels (7) being pivoted by an at least substantially vertical pivot axis (at hinge mounted at 8) substantially in said plane of the opening at and/or adjacent a vertical periphery of said opening, and

a distal region of the other panel (9) being supported by at least one supporting runner (15, 16, 17),

said supporting runner (15, 16, 17) running on a support track (10) which, at least in part is skewed, with respect to said plane of said opening, and has an effect of spacing said supporting runner out of said plane of said opening at/or adjacent said proximal periphery, Ferris: Figs. 1 – 6.

Ferris fails to teach a locking pin.

However, Houk et al. teaches a locking pin (61) being provided fixed relative to said building, said locking pin (61) positioned to engage at said distal region of said other panel (14) against an outwardly facing surface of said other panel (14) when said panels (13, 14) are at and proximate to said closed condition to capture said other panel (14) from moving outwardly, Houk et al.: Figs. 1-2.

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Ferris and Houk et al. before him at the time the invention was made, to modify Ferris as taught by Houk et al. to include the locking pin of Houk et al., in order to obtain secure panel closure. One would have been motivated to make such a combination because secure panel closure for safety against unexpected door forces would have been obtained, as suggested by Houk et al.

Re Claim 2: Ferris modified by Houk et al. teaches a closure assembly as claimed in claim 1.

Moreover, Ferris teaches wherein the proximate panel (7) is pivoted by said substantially vertical pivot axis (at hinge mounted at 8) fixed relative to said opening, Ferris: Figs. 1 – 6.

Re Claim 7: Ferris modified by Houk et al. teaches a closure assembly as claimed in claim 1.

Moreover, Ferris teaches wherein the support track (10) is substantially rectilinear in form and is at an acute angle with respect to the plane of the opening, Ferris: Figs. 1 – 6.

Re Claim 8: Ferris modified by Houk et al. teaches a closure assembly as claimed in claim 1.

Moreover, Ferris teaches wherein the support track (10) is at least in part rectilinear in form and said part is at an acute angle with respect to the plane of the opening, Ferris: Figs. 1 – 6.

Re Claim 17: Ferris modified by Houk et al. teaches a closure assembly as claimed in claim 1.

Moreover, Ferris teaches wherein the supporting runner (15, 16, 17) is provided at the top of the distal panel (9), Ferris: Figs. 1 – 6.

Re Claim 21: Ferris modified by Houk et al. teaches a closure assembly as claimed in claim 1.

Moreover, Ferris teaches wherein the one panel (7) is pivoted by a fixed vertical pivot axis (at hinge mounted at 8) at the vertical periphery, Ferris: Figs. 1 – 6.

Re Claim 22: Ferris modified by Houk et al. teaches a closure assembly as claimed in claim 1.

Moreover, Ferris teaches wherein said panels (7, 9) in an open position, lie substantially parallel to the plane of the opening, Ferris: Figs. 1 – 6.

Re Claim 27: Ferris modified by Houk et al. teaches a closure assembly as claimed in claim 1.

Moreover, Ferris teaches a closure assembly as claimed in claim 1 wherein said supporting runner (15, 16, 17) is a top runner affixed to a top or upper part of said other panel (9), and wherein said opening of or in said building includes a head framing (as shown in Fig. 1), said support track (10) is incorporated in a head assembly (12, 13, 14), said head assembly (12, 13, 14) including

a) a longitudinally extending foundation member (13) to be fastened to the head framing of said opening with a longitudinal direction of said foundation member parallel to the plane of said opening,

b) a subassembly carrying the support track (10), fastened to said foundation member (13) yet in a manner to allow the displacement of the said support track (10) in a manner selected from at least one of

(i) a linear manner to and from a bottom of said opening, and

(ii) a manner to allow tilt of said support track about a horizontal axis parallel to the plane of said opening, Ferris: Figs. 1 – 6.

Re Claim 57: Ferris teaches a building including a closure assembly to an opening of said building, said closure assembly comprising

at least two mutually pivoted panels (7, 9) mounted with a mutual pivot axis (at hinge mounted at 8) at least substantially vertical and so as to be movable between:

(i) a closed condition whereby said at least two panels (7, 9), at least substantially in mutual alignment, provide at least a partial closure of said opening in or substantially parallel to a plane of said opening, and

(ii) an opened condition whereby said at least two panels (7, 9), mutually disaligned by having pivoted mutually towards each other, are substantially clear of said plane of said opening and where one of each, or all of said at least two panels (7, 9), lie at an acute angle or parallel with respect to said plane of said opening,

one of said panels (7) pivoted by an at least substantially vertical pivot axis (at hinge mounted at 8) substantially in said plane of said opening at and/or adjacent a vertical periphery of said opening, and

a distal region of the other panel being supported by at least one supporting runner (15, 16, 17),

said supporting runner (15, 16, 17) running on a support track (10) which, at least in part is skewed with respect to said plane of said opening, and has an effect of spacing said supporting runner (15, 16, 17) out of said plane of said opening at/or adjacent said proximal periphery, Ferris: Figs. 1 – 6.

Ferris fails to teach a locking pin.

However, Houk et al. teaches a locking pin (61) being provided fixed relative to said building, said locking pin (61) positioned to engage at said distal region of said other panel (14) against an outwardly facing surface of said other panel (14) when said panels (13, 14) are at and proximate to said closed condition to capture said other panel (14) from moving outwardly, Houk et al.: Figs. 1-2.

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Ferris and Houk et al. before him at the time the invention was made, to modify Ferris as taught by Houk et al. to include the locking pin of Houk et al., in order to obtain secure panel closure. One would have been motivated to make such a combination because secure panel closure for safety against unexpected door forces would have been obtained, as suggested by Houk et al.

2. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ferris in view of Houk et al. as applied to claim 1 above, and further in view of Porter United States Patent number 1 934 089.

As discussed above, Ferris modified by Houk et al. teaches all the elements as applied to claim 1.

Ferris modified by Houk et al. fails to teach wherein said proximate panel is pivoted by a substantially vertical pivot axis horizontally movable relative to and within the plane of the opening.

However, Porter teaches wherein said proximate panel (71) is pivoted by said substantially vertical pivot axis (22) horizontally movable relative to and within the plane of the opening, Porter: Fig. 13.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, having the teachings of Ferris and Houk et al., as applied to claim 1 above, and Porter before him, to modify Ferris in view of Houk et al., as applied above, to further include the vertical pivot axis to be horizontally movable as taught by Porter, in order to obtain an operative door. One would have been motivated to make such a combination because a more readily opened and folded door with panels folded together out of the doorway would have been obtained, as taught by Porter.

3. Claims 4 – 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferris in view of Houk et al. as applied to claim 1 above, and further in view of Piper United States Patent number 1 265 952.

Re Claim 4: As discussed above, Ferris modified by Houk et al. teaches all the elements as applied to claim 1.

Ferris modified by Houk et al. fails to teach wherein said supporting runner includes a wheeled bogie engaged with the support track.

However, Piper teaches wherein said supporting runner (16) includes a wheeled bogie (17, 18) engaged with the support track (19), Piper: Figs. 1 and 3.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, having the teachings of Ferris and Houk et al., as applied to claim 1 above, and Piper before him, to modify Ferris in view of Houk et al., as applied above, to further include the wheeled bogie engaged with the support track as taught by Piper, in order to obtain an operative door. One would have been motivated to make such a combination because a more readily opened and folded door with panels folded together out of the doorway would have been obtained, as taught by Piper.

Re Claim 5: As discussed above, Ferris modified by Houk et al. teaches all the elements as applied to claim 1.

Ferris modified by Houk et al. fails to teach wherein said support runner includes a vertical axis pivot to allow said wheeled bogie to pivot relative to said distal panel about a vertical axis.

However, Piper teaches wherein said supporting runner (16) includes a vertical axis pivot to allow said wheeled bogie (17, 18) to pivot relative to said distal panel (8) about a vertical axis, Piper: Figs. 1 and 3.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, having the teachings of Ferris and Houk et al., as applied to claim 1 above, and Piper before him, to modify Ferris in view of Houk et al., as applied above, to further include the wheeled bogie that pivots relative to the distal panel as taught by Piper, in order to obtain an operative door. One would have been motivated to make such a combination because a more readily opened and folded door

with panels folded together out of the doorway would have been obtained, as taught by Piper.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ferris in view of Houk et al. and Piper as applied to claim 5 above, and further in view of Labelle United States Patent number 4 408 369.

As discussed above, Ferris modified by Houk et al. and Piper teaches all the elements as applied to claim 5.

Ferris modified by Houk et al. and Piper fails to teach wherein said vertical axis of said pivot of said wheeled bogie is located at the mid thickness of said distal panel.

However, Labelle teaches wherein said vertical axis (83) of said pivot of said wheeled bogie (65) is located at the mid thickness of said distal panel (9), Labelle: Fig.

3.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, having the teachings of Ferris, Houk et al. and Piper, as applied to claim 5 above, and Labelle before him, to modify Ferris in view of Houk et al. and Piper, as applied above, to further include the wheeled bogie that pivots relative to the distal panel is located at the mid thickness of said distal panel as taught by Labelle, in order to obtain an operative door. One would have been motivated to make such a combination because a more readily opened and folded door with panels folded together out of the doorway would have been obtained, as taught by Labelle.

5. Claims 9, 10, 64, 38, 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferris in view of Houk et al. as applied to claim 1 above, and further in view of Frantz United States Patent number 1 570 958.

Re Claim 9: As discussed above, Ferris modified by Houk et al. teaches all the elements as applied to claim 1.

Ferris modified by Houk et al. fails to teach wherein the support track is rectilinear in form and parallel with the plane of the opening save for that part thereof immediately proximal to the proximal periphery, where said support track is angled to the plane of said opening to step the supporting runner out of the plane of the opening.

However, Frantz teaches wherein the support track is rectilinear in form (12) and parallel with the plane of the opening save for that part thereof immediately proximal to the proximal periphery, where said support track is angled (13) to the plane of said opening to step the supporting runner out of the plane of the opening, Frantz: Fig. 2.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, having the teachings of Ferris and Houk et al., as applied to claim 1 above, and Frantz before him, to modify Ferris in view of Houk et al., as applied above, to further include the use of a support track that has a straight and a curved section as taught by Frantz, in order to obtain an operative door. One would have been motivated to make such a combination because a more readily opened and folded door with panels folded together out of the doorway would have been obtained, as taught by Frantz.

Re Claim 10: As discussed above, Ferris modified by Houk et al. teaches all the elements as applied to claim 1.

Ferris modified by Houk et al. fails to teach wherein the support track is curved.

However, Frantz teaches wherein the support track (12, 13, 14) is curved, Frantz: Fig. 2.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, having the teachings of Ferris and Houk et al., as applied to claim 1 above, and Frantz before him, to modify Ferris in view of Houk et al., as applied above, to further include the use of a support track that is curved as taught by Frantz, in order to obtain an operative door. One would have been motivated to make such a combination because a more readily opened and folded door with panels folded together out of the doorway would have been obtained, as taught by Frantz.

Re Claim 64: As discussed above, Ferris modified by Houk et al. and Frantz teaches all the elements as applied to claim 9.

Ferris modified by Houk et al. fails to teach wherein said support track is in said plane of said opening.

However, Frantz teaches wherein the support track (12, 13, 14) is in said plane of said opening, Frantz: Fig. 2.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, having the teachings of Ferris and Houk et al., as applied to claim 1 above, and Frantz before him, to modify Ferris in view of Houk et al., as applied above, to further include the use of a support track that is in said plane of said

opening as taught by Frantz, in order to obtain an operative door. One would have been motivated to make such a combination because a more readily opened and folded door with panels folded together out of the doorway would have been obtained, as taught by Frantz.

Re Claim 38: As discussed above, Ferris as modified by Houk et al. and Frantz teaches all the elements as applied to claim 64.

Moreover, Houk et al. teaches wherein said locking pin captures said distal region against a jam portion of a frame to thereby prevent said distal region from moving outwardly, Houk et al.: Figs. 1-2.

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Ferris, Houk et al. and Frantz before him at the time the invention was made, to include the locking pin of Houk et al., in order to obtain secure panel closure. One would have been motivated to make such a combination because secure panel closure for safety against unexpected door forces would have been obtained, as suggested by Houk et al.

Re Claim 39: As discussed above, Ferris as modified by Houk et al. and Frantz teaches all the elements as applied to claim 38.

Moreover, Ferris teaches wherein said other panel (9) is supported at a top or bottom thereof by said support runner (15, 16, 17) and wherein at the other of said top or bottom the distal region of said other panel includes an outwardly facing surface, Ferris: Figs. 1 – 6.

Furthermore, Houk et al. teaches an outwardly facing surface to be captured by said locking pin, Houk et al.: Figs. 1-2.

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Ferris, Houk et al. and Frantz before him at the time the invention was made, to include the locking pin of Houk et al., in order to obtain secure panel closure. One would have been motivated to make such a combination because secure panel closure for safety against unexpected door forces would have been obtained, as suggested by Houk et al.

Re Claim 40: As discussed above, Ferris as modified by Houk et al. and Frantz teaches all the elements as applied to claim 39.

Moreover, Ferris teaches wherein said outwardly facing surface is concealed by the outside surface of said other panel, Ferris: Figs. 1 – 6.

6. Claim 11, 12 – 16, 18, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferris in view of Houk et al. and further in view of Ellison United States Patent number 1 964 316.

Re Claim 11: As discussed above, Ferris modified by Houk et al. teaches all the elements as applied to claim 1.

Ferris modified by Houk et al. fails to teach wherein the distal region of the other panel is supported by one supporting runner affixed at a vertical supported location either at the top or bottom of the other panel.

However, Ellison teaches wherein the distal region of the other panel (20) is supported by one supporting runner (47) affixed at a vertical supported location either at the top or bottom of the other panel (20), Ellison: Fig. 8 and 9.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, having the teachings of Ferris and Houk et al., as applied to claim 1 above, and Ellison before him, to modify Ferris in view of Houk et al., as applied above, to further include the support of the distal panel by a supporting runner affixed at the bottom of the distal panel as taught by Ellison, in order to obtain an operative door. One would have been motivated to make such a combination to ensure the positioning of said panels in a desired position to assure control of the positioning of said closure assembly when fully open, as taught by Ellison.

Re Claim 12: As discussed above, Ferris modified by Houk et al. and Ellison teaches all the elements as applied to claim 11.

Moreover, Ferris teaches wherein the other of said top or bottom to said vertical supported location is associated with a guiding runner (15, 16, 17) tracked by a guiding track (10) in the plane or parallel to the plane of the opening, the guiding runner (15, 16, 17) nevertheless allowing an extensible association of the guiding runner (15, 16, 17) with the other panel (9), movement for the other panel (9) in following the support track (10) defined locus allowing the distal region of the other panel (9) to move as guided and pivoted with respect to the opening by the supporting runner (15, 16, 17) guided by the support track (10), Ferris: Figs. 1 – 6.

Re Claim 13: As discussed above, Ferris modified by Houk et al. and Ellison teaches all the elements as applied to claim 11.

Moreover, Ferris teaches wherein the other of said top or bottom to said vertical supported location is associated with a guiding runner (15, 16, 17) tracked by a guiding track (10) in the plane or parallel to the plane of the opening, the guiding runner (15, 16, 17) including an extensile arm (12) pivotally attached to the distal panel (9), said extensile arm (12) allowing the following of the support track (10) defined locus required to allow the distal region of the other panel (9) to move as constrained by said support track (10), Ferris: Figs. 1 – 6.

Re Claim 14: As discussed above, Ferris modified by Houk et al. and Ellison teaches all the elements as applied to claim 12.

Moreover, Ferris teaches wherein the guiding runner (15, 16, 17) includes an articulation arm (12) extending in a pivotal manner between the other panel (9), at or towards the distal region, said articulation arm (12) being further pivotally associated with said guiding track (10) via a runner bogie (at 15) located with and guided by the guiding track (10), thereby providing said extensile association, Ferris: Figs. 1 – 6.

Re Claim 15: As discussed above, Ferris modified by Houk et al. and Ellison teaches all the elements as applied to claim 14.

Moreover, Ferris teaches wherein said articulation arm (12) is a rigid arm, Ferris: Figs. 1 – 6.

Re Claim 16: As discussed above, Ferris modified by Houk et al. and Ellison teaches all the elements as applied to claim 15.

Moreover, Ferris teaches wherein said rigid arm (12) extends perpendicular to said plane of said opening when said panels (7, 9) are in said open condition, Ferris: Figs. 1 – 6.

Re Claim 18: As discussed above, Ferris modified by Houk et al. and Ellison teaches all the elements as applied to claim 12.

Moreover, Ellison teaches wherein the guiding runner (47) is located at the bottom of the distal panel (20), Ellison: Figs. 8 and 9.

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Ellison, in addition to the teachings of Ferris and Houk et al., at the time the invention was made, to modify the closure assembly, as taught by Ellison, which allows the support of the distal panel by a supporting runner affixed at the bottom of the distal panel so as to ensure the positioning of said panels in a desired position to assure control of the positioning of said closure assembly when fully open for the convenience of the user.

Re Claim 19: As discussed above, Ferris modified by Houk et al. and Ellison teaches all the elements as applied to claim 12.

Moreover, Ellison teaches wherein the guiding runner (28, 29) is provided at the top of the other panel (9) and the supporting runner (47) is located at the bottom of the other panel (9), Ellison: Figs. 2, 8 and 9 5.

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Ellison, in addition to the teachings of Ferris and Houk et al., at the time the invention was made, to modify the closure assembly, as taught by Ellison, which

allows the support of the distal panel by a supporting runner affixed at the top and bottom of the distal panel so as to ensure the positioning of said panels in a desired position to assure control of the positioning of said closure assembly when fully open for the convenience of the user.

Re Claim 20: As discussed above, Ferris modified by Houk et al. teaches all the elements as applied to claim 1.

Ferris modified by Houk et al. fails to teach wherein the distal region of the other panel is supported by a top and bottom located supporting runner, each supporting runner running in a respective said support track, disposed at the top and bottom of the opening.

However, Ellison teaches wherein the distal region of the other panel is supported by a top (28, 29) and bottom (47) located supporting runner, each supporting runner running in a respective said support track (5, 3), disposed at the top and bottom of the opening, Ellison: Figs. 1, 2, 8 and 9.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, having the teachings of Ferris and Houk et al., as applied to claim 1 above, and Ellison before him, to modify Ferris in view of Houk et al., as applied above, to further include the support of the distal panel by a supporting runner affixed at the bottom of the distal panel as taught by Ellison, which allows the support of the distal panel by a supporting runners affixed at the top and bottom of the distal panel, with their respective tracks, so as to ensure the positioning of said panels in a desired position to assure control of the positioning of said closure assembly when fully open.

7. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ferris in view of Houk et al., as applied to claim 27, and further in view of Dodson et al. United States Patent number 6 467 226.

As discussed above, Ferris as modified by Houk et al. teaches all the elements as applied to claim 27.

Moreover, Dodson et al. teaches wherein said foundation member is fixed to said side frame members, Dodson et al.: Fig. 1.

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Ferris and Houk et al., in addition to the teachings of Dodson et al., at the time the invention was made, to modify the closure assembly, as taught by Dodson et al. in light of the previously mentioned teachings of Ferris and Houk et al., which allows the use of a fully framed closure assembly made of an assembly of extruded forms to have a foundation member fixed to said side frame members to have an integral structure that is convenient to install and replace for the convenience of the user.

8. Claims 30, 35 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferris in view of Houk et al., as applied to claim 27, and further in view of Johnsen United States Patent number 4 836 494.

Re Claim 30: As discussed above, Ferris as modified by Houk et al. teaches all the elements as applied to claim 27.

Ferris as modified by Houk et al. fails to teach wherein said subassembly is engaged to said foundation member by two arrays of vertically extending adjustment screws, a first array and a second array parallel to each other and to the plane of the opening;

a) wherein differential adjustment of said adjustment screws in one array relative to said adjustment screws in the other array induces said tilt, and

b) wherein corresponding adjustment of said adjustment screws in both said first array and said second array induces displacement in said linear manner.

However, Johnsen teaches wherein said subassembly is engaged to said foundation member by two arrays of vertically extending adjustment screws, a first array and a second array parallel to each other and to the plane of the opening;

a) wherein differential adjustment of said adjustment screws in one array relative to said adjustment screws in the other array induces said tilt, and

b) wherein corresponding adjustment of said adjustment screws in both said first array and said second array induces displacement in said linear manner, Johnsen: Fig.

2.

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Ferris and Houk et al., in addition to the teachings of Johnsen, at the time the invention was made, to modify the closure assembly, as taught by Johnsen in light of the previously mentioned teachings Ferris modified by Houk et al., which allows the use of a subassembly that uses two arrays of parallel screws to level the rail so as to have an integral structure that is convenient to install and replace.

Re Claim 35: As discussed above, Ferris as modified by Houk et al. and Johnsen teaches all the elements as applied to claim 30.

Moreover, Johnsen teaches wherein said first array of fastening screws is provided parallel to and on a first side of said plane of said opening and the second array is provided parallel to and on the other side of said plane of said opening, Johnsen: Fig. 2.

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Ferris and Houk et al., in addition to the teachings of Johnsen, at the time the invention was made, to modify the closure assembly, as taught by Johnsen in light of the previously mentioned teachings Ferris modified by Houk et al., which allows the mounting of a track rail that uses two arrays of parallel screws to level said rail so as to have an integral structure that is convenient to install and replace.

Re Claim 36: As discussed above, Ferris as modified by Houk et al. and Johnsen teaches all the elements as applied to claim 35.

Moreover, Johnsen teaches wherein said screws of each array are equispaced, Johnsen: Fig. 2.

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Ferris and Houk et al., in addition to the teachings of Johnsen, at the time the invention was made, to modify the closure assembly, as taught by Johnsen in light of the previously mentioned teachings Ferris modified by Houk et al., which allows the mounting of a track rail that uses two arrays of parallel screws that are equispaced

to level said rail so as to have an integral structure that is convenient to install and replace.

9. Claims 31 – 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferris as modified by Houk et al. and Johnsen, and further in view of Plowman United States Patent number 4 590 706.

Re Claim 31: As discussed above, Ferris as modified by Houk et al. and Johnsen teaches all the elements as applied to claim 30.

Ferris as modified by Houk et al. and Johnsen fails to teach a pelmet.

However, Plowman teaches wherein said subassembly includes a pelmet (22),
Plowman: Fig. 1.

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Ferris, Houk et al., and Johnsen, in addition to the teachings of Plowman, at the time the invention was made, to modify the closure assembly, as taught by Plowman, which allows the use of a subassembly that includes a pelmet so as to have an integral structure that is convenient to install and replace.

Furthermore, Johnsen teaches with which said track (1) is fastened and disposed therefrom in a manner to be exposed for engagement with the supporting runner,
Johnsen: Fig. 2.

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Ferris, Houk et al., and Plowman, in addition to the teachings of Johnsen, at the time the invention was made, to modify the closure assembly, as taught

by Johnsen, which allows the mounting of a track rail that uses two arrays of parallel screws to level said rail so as to have an integral structure that is convenient to install and replace.

Re Claim 32: As discussed above, Ferris as modified by Houk et al., Johnsen and Plowman teaches all the elements as applied to claim 31.

Moreover, Plowman teaches wherein said pelmet (22) extends outwardly from the plane of the opening sufficient to present from below thereof said support track and to allow spacing of the supporting runner to assume the opened condition, Plowman: Fig. 1.

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Ferris, Houk et al. and Johnsen, in addition to the teachings of Plowman, at the time the invention was made, to modify the closure assembly, as taught by Plowman, which allows the use of a subassembly that includes a pelmet that extends outwardly so as to have an integral structure that is convenient to install and replace.

Re Claim 33: As discussed above, Ferris as modified by Houk et al., Johnsen and Plowman teaches all the elements as applied to claim 32.

Moreover, Plowman teaches wherein said pelmet (22) is an elongate, and substantially constant cross section member, Plowman: Fig. 1.

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Ferris, Houk et al. and Johnsen, in addition to the teachings of Plowman, at the time the invention was made, to modify the closure assembly, as

taught by Plowman, which allows the use of a subassembly that includes a pelmet that extends outwardly so as to have an integral structure that is convenient to install and replace.

Furthermore, the limitation regarding the pelmet being formed by extrusion is a product by process limitation. Determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. MPEP 2113.

Re Claim 34: As discussed above, Ferris as modified by Houk et al., Johnsen and Plowman teaches all the elements as applied to claim 33.

Moreover, Plowman teaches wherein said pelmet includes trimming panels (17) on each side of said support track spanning any gap between said support track and longitudinal edges of said pelmet, Plowman: Fig. 1.

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Ferris, Houk et al. and Johnsen, in addition to the teachings of Plowman, at the time the invention was made, to modify the closure assembly, as taught by Plowman, which allows the use of a subassembly that includes a pelmet that includes trimming panels extends outwardly so as to have an integral structure that is convenient to install and replace.

10. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ferris in view of Houk et al. as applied to claim 1 above, and further in view of West United States Patent number 5 295 527.

As discussed above, Ferris modified by Houk et al. teaches all the elements as applied to claim 1.

Moreover, Ferris teaches wherein the proximal periphery disposed region of said one panel on the to be other panel facing side thereof when in the opened condition, Ferris: Figs. 1 – 6.

Ferris fails to teach mutually attractive means.

However, West teaches the use of mutually attractive means to secure two panels together, West: Fig. 20.

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Ferris and Houk et al., in addition to the teachings of West, at the time the invention was made, to modify the closure assembly, as taught by West in light of the previously mentioned teachings of Ferris and Houk et al., which allows the securing of two panels together by mutually attractive means so as to ensure the positioning of said panels in a desired position to assure control of the positioning of said closure assembly when fully open.

11. Claims 43 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferris as modified by Houk et al. and West, and further in view of Lacoste et al. United States Patent number 6 003 583.

Re Claim 43: As discussed above, Ferris as modified by Houk et al. and West teaches all the elements as applied to claim 41.

Ferris as modified by Houk et al. and West fails to teach wherein said first and second mutually attractive parts are both magnets.

However, Lacoste et al. teaches wherein said first and second mutually attractive parts are both magnets, Lacoste et al.: Fig. 4.

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Ferris, Houk et al. and West, in addition to the teachings of Lacoste et al., at the time the invention was made, to modify the closure assembly, as taught by Lacoste et al., which allows the securing of two panels together by magnets so as to ensure the positioning of said panels in a desired position to assure control of the positioning of said closure assembly when fully open for the convenience of the user.

Re Claim 44: As discussed above, Ferris as modified by Houk et al., West and Lacoste et al. teaches all the elements as applied to claim 43.

Moreover, Lacoste et al. teaches wherein said first and second mutually attractive parts are positioned towards the bottom of said panels, Lacoste et al.: Fig. 1.

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Ferris, Houk et al. and West, in addition to the teachings of Lacoste et al., at the time the invention was made, to modify the closure assembly, as taught by Lacoste et al., which allows the securing of two panels together by first and second mutually attractive means positioned toward the bottom of said panels so as to ensure

the positioning of said panels in a desired position to assure control of the positioning of said closure assembly when fully open for the convenience of the user.

1. Claims 58 - 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferris in view of Plowman, Houk et al. and Susnar United States Patent number 5 099 904.

Re Claim 58: Ferris teaches a closure assembly of an opening of or in a building, said closure assembly comprising

at least two mutually pivoted panels (7, 9) mounted with a mutual pivot axis (at hinge mounted at 8) at least substantially vertical and so as to be movable between:

(i) a closed condition whereby said at least two panels (7, 9), at least substantially in mutual alignment, provide at least a partial closure of said opening in or substantially parallel to a plane of said opening, and

(ii) an opened condition whereby said at least two panels (7, 9), mutually disaligned by having pivoted mutually towards each other, are substantially clear of said plane of said opening and where one of each, or all of said at least two panels, lie at an acute angle or parallel with respect to said plane of said opening,

one of said panels (7) being pivoted by an at least substantially vertical pivot axis (at hinge mounted at 8) substantially in said plane of the opening at and/or adjacent a vertical periphery of said opening, and

a distal region of the other panel (9) being supported by at least one supporting runner (15, 16, 17),

said supporting runner (15, 16, 17) running on a support track (10) which, at least in part is skewed, with respect to said plane of said opening, and has an effect of spacing said supporting runner out of said plane of said opening at/or adjacent said proximal periphery, Ferris: Figs. 1 – 6.

Ferris fails to teach said closure assembly being fully framed and a perimeter of said fully framed closure assembly being defined by a frame structure of a size to be received in said opening of or in said building.

However, Plowman teaches said closure assembly being fully framed and a perimeter of said fully framed closure assembly being defined by a frame structure of a size to be received in said opening of or in said building, Plowman: Figs 1-2.

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Ferris and Plowman before him at the time the invention was made, to modify Ferris as taught by Plowman to include the fully frames closure assembly of Plowman, in order to obtain a secure panel closure. One would have been motivated to make such a combination because secure panel closure for safety against unexpected door forces would have been obtained, as suggested by Plowman.

Ferris modified by Plowman fails to teach a locking pin.

However, Houk et al. teaches a locking pin (61) being provided fixed relative to said building, said locking pin (61) positioned to engage at said distal region of said other panel (14) against an outwardly facing surface of said other panel (14) when said panels (13, 14) are at and proximate to said closed condition to capture said other panel (14) from moving outwardly, Houk et al.: Figs. 1-2.

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Ferris, Plowman and Houk et al. before him at the time the invention was made, to modify Ferris as modified by Plowman as taught by Houk et al. to include the locking pin of Houk et al., in order to obtain secure panel closure. One would have been motivated to make such a combination because secure panel closure for safety against unexpected door forces would have been obtained, as suggested by Houk et al.

Ferris modified by Plowman and Houk et al. fails to teach a bump strip.

However, Susnar teaches said bump strip (37) positioned to engage an inwardly facing surface of said other panel when said panels are at and proximate to said closed condition, to capture at least part of said other panel between said locking pin and said bump strip (37) and prevent said other panel from moving outwardly, Susnar: Fig. 3.

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Ferris, Plowman and Houk et al. before him at the time the invention was made, to modify Ferris as modified by Plowman and Houk et al. as taught by Susnar to include the bump strip of Susnar, in order to obtain secure panel closure. One would have been motivated to make such a combination because secure panel closure for safety against unexpected door forces would have been obtained, as suggested by Susnar.

Re Claim 59: Ferris modified by Plowman, Houk et al. and Susnar teaches the closure assembly as claimed in claim 58.

Moreover, Plowman teaches wherein said flame structure is at least in part an assembly of extruded forms, Plowman: Figs 1-2.

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Ferris, Plowman, Houk et al. and Susnar before him at the time the invention was made, to include the assembly of extruded forms of Plowman, in order to obtain secure panel closure. One would have been motivated to make such a combination because secure and unitary panel closure for safety against unexpected door forces would have been obtained.

Re Claim 60: Ferris modified by Plowman, Houk et al. and Susnar teaches the closure assembly as claimed in claim 59.

Moreover, Plowman teaches wherein said frame structure includes
a top frame extrusion,
a bottom frame extrusion parallel to said top frame extrusion and to extend horizontally in use, and
two side frame extrusions affixed to and extending between said top and bottom frame extrusions and parallel to each other and to in use extend vertically, Plowman: Figs 1-2.

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Ferris, Plowman, Houk et al. and Susnar before him at the time the invention was made, to include the assembly of extruded forms of Plowman, in order to obtain secure panel closure. One would have been motivated to make such a combination because secure and unitary panel closure for safety against unexpected door forces would have been obtained.

Re Claim 61: Ferris modified by Plowman, Houk et al. and Susnar teaches the closure assembly as claimed in claim 60.

Moreover, Ferris teaches wherein said supporting runner (15, 16, 17) is a top runner affixed to a top or upper part of said other panel (9), wherein said top frame extrusion is a head assembly, said head assembly (12, 13, 14) including

a) a longitudinally extending foundation member (13) to be fastened to the head framing of said opening with a longitudinal direction of said foundation member parallel to the plane of said opening,

b) a subassembly carrying the support track (10), fastened to said foundation member (13) yet in a manner to allow the displacement of the said support track (10) in a manner selected from at least one of

- (i) a linear manner to and from a bottom of said opening, and
- (ii) a manner to allow tilt of said support track about a horizontal axis parallel to the plane of said opening, Ferris: Figs. 1 – 6.

2. Claim 62 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ferris in view of Plowman, Houk et al. and Susnar, as applied to claim 61, and further in view of Dodson et al..

As discussed above, Ferris as modified by Plowman, Houk et al. and Susnar teaches all the elements as applied to claim 61.

Ferris as modified by Plowman, Houk et al. and Susnar fails to teach wherein said foundation member is fixed to said side frame members.

Moreover, Dodson et al. teaches wherein said foundation member is fixed to said side frame members, Dodson et al.: Fig. 1.

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Ferris as modified by Plowman, Houk et al. and Susnar, in addition to the teachings of Dodson et al., at the time the invention was made, to modify the closure assembly, as taught by Dodson et al., which allows the use of a fully framed closure assembly made of an assembly of extruded forms to have a foundation member fixed to said side frame members to have an integral structure that is convenient to install and replace for the convenience of the user.

3. Claim 63 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ferris as modified by Houk et al., as applied to claim 1, and further in view of Hicks United States Patent Application Publication number 2005 0 056 386.

Re Claim 63: As discussed above, Ferris as modified by Houk et al. teaches all the elements as applied to claim 1.

Ferris as modified by Houk et al. fails to teach wherein said panels are glazed.

However, Hicks teaches wherein said panels are glazed, Hicks: paragraph [0014].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, having the teachings of Ferris and Houk et al., as applied to claim 1 above, and Hicks before him, to modify Ferris in view of Houk et al., as applied above, to further include the glazed panels as taught by Hicks, in order to

obtain transparent panels. One would have been motivated to make such a combination because transparent panels for viewing outside of the enclosure for the enjoyment of the scenery would have been obtained, as suggested by Hicks.

Response to Arguments

Submitted changes to the Abstract in the Amendment of 03/16/2009 are acknowledged.

Submitted changes to the Drawings in the Amendment of 03/16/2009 are acknowledged. These drawings are acceptable.

Objections to the Specification are withdrawn in view of the amendment of 03/16/2009 by Applicant.

Rejection under Section 112 of claims 1, 9, 11, 12, 14, 15, 24, 25, 28, 37, 38, 41-44 and 57 are withdrawn in view of the amendment of 03/16/2009 by Applicant.

Applicant's arguments with respect to all claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAIME F. CARDENAS-GARCIA whose telephone number is (571) 270-5375. The examiner can normally be reached on m-f 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Katherine W. Mitchell can be reached on (571) 272-7069. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JAIME F. CARDENAS - GARCIA/
Examiner, Art Unit 3634

/KATHERINE W MITCHELL/
Supervisory Patent Examiner, Art Unit 3634